

MOTIVATION TO CONSUME FISH (SEAFOOD) IN VIETNAM

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ABSTRACT

This study extends Theory of Planned Behavior (TPB) to investigate the motivation to consume fish in a representative survey of Vietnamese individuals. The empirical study is based on using the structural equation approach to test construct validity of measures and the empirical fit of theoretical model. The results show that the TPB is significantly applicable to the Vietnam situation. The 23% of the variation of eating fish frequency is significantly explained by motivation and perceived behavioral control. The motivation to consume fish as measured by intention is significantly determined by subjective norms and attitude toward fish as meal; the two constructs explained for 35% of the motivation variation. At the specific level, the study found that negative affect, perceived quality and price are significant indicators that explains for 60% of the variation of the attitude construct; perceived price, time using to cook and prepare fish as meal and availability of fresh fish are important factors explaining for 63% of the variation of the perceived control over fish consumption. As one of the first attempts, the study provide some managerial suggestions for seafood sector to expand the domestic markets and also raise some recommendations for future research.

Keywords: Theory of planned behaviour, attitude, perceived control, fish, Vietnam

INTRODUCTION

Food and seafood consumption behaviour is influenced by many interrelating factors of product attributes (flavour, texture, odour, quality, and convenience), person (personality, preference, attitudes, perception, and knowledge), and cultural and social environment (availability, season, situation, and culture) (Olsen, 2004; Shepherd, 1989). The most popular theoretical models applied are probably the theory of reason action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and the theory of planned behaviour (TPB) (Ajzen, 1991).

The primary objective is to investigate the consumer general motivation (intention) toward eating fish (seafood) using the TPB as a conceptual framework. Secondly, this study identifies product cues and attributes that explain the attitude and perceived behavioural control to consume fish. The study is expected to contribute both theoretical and managerial implications.

THEORETICAL FRAMEWORK

According to the Theory of Reasoned Action (Fishbein & Ajzen 1975) humans behavior is under their volitional control. A person will perform a given behavior according to his intention, attitude and beliefs about performance of the behavior. Intention is assumed as the best predictors of behavior. The stronger the intention to engage in the behavior, the more likely should be its performance. Intention is assumed as motivational factors influencing the behavior; it indicates the individual's willing and effort to perform the behavior (Fishbein & Ajzen 1975).

Intention in turn is determined by attitude toward behavior and subjective norm (SN) related to the behavior. These two determinants reflect the personal and environmental factors. While personal factors reflect the positive or negative evaluation of individuals toward behavioral consequences, the environmental factors imply the person's perception of social pressures on him to perform or not perform the behavior in question (Fishbein & Ajzen 1975).

Ajzen (1991) revised the TRA by introducing an additional component of perceived behavioral control as well known as the theory of planned behavior (TPB). According to TPB, behavioral intention is something like a plan to achieve the behavior while PBC refers to abilities necessary for carrying out that plan. The link between intention and behavior reflects the fact that people tend to engage in behavior they intend to perform. The link between PBC and behavior is more complex: a direct relation or indirect relation mediating through intention. This relationship suggests that people are more likely to engage in (attractive/desirable) behaviors they have control over, conversely they are prevented from carrying out the behaviors over which they have no control. If the intentions are held constant, behavior will be more likely to be performed as PBC increases (Ajzen, 1991).

Within conceptual framework of TRA, beliefs about a given behavior provide the basis for formation of intention toward performing the behavior. Beliefs refer to a person's subjective probability judgments concerning some discriminable aspects of his world; they deal with the person's perception of himself and his environment (Fishbein & Ajzen 1975). Attitude, norms and perceived behavioral control are assumed to be driven by behavioral beliefs, normative beliefs, and control beliefs, respectively.

TPB is applied as conceptual framework for our study both global and specific level. The main assumptions proposed are in accordance with the theory of planned behaviour (Ajzen 1991). Additionally, we examined the role of several fish attributes and cues in forming an attitude toward and perceived behavioural control over fish consumption (Oude Ophuis & Van Trijp, 1995). It is assumed that perceived quality and price have a significant influence on attitude toward fish consumption; availability of fish, time required to cook and prepare, and price are significant interpreters of perceived behavioural control over fish consumption (Olsen, 2004). The bones and smell attributes of fish are assumed to have negative effects on attitude.

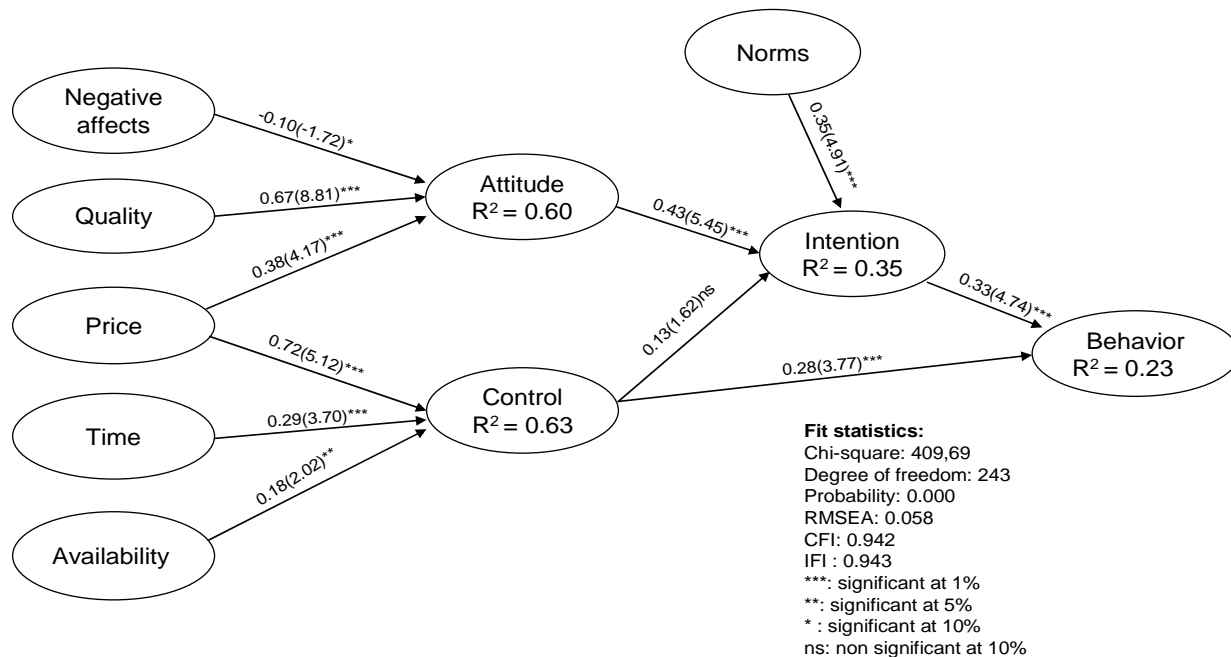
METHODS

Survey data were collected by questionnaire in Bacninh, an inland province in the Northern of Vietnam, in August 2006. The respondents were personally interviewed at home and completed a questionnaire requiring 30-45 minutes of their time. The questions in questionnaire is arranged as previous studies. We used structural equation modeling (Anderson & Gerbing 1988) to estimated the causal relationship. The package of Amos 7.0 is used to run the structural model.

RESULTS AND DISCUSSION

The results shown that the data fit well the assumed model. All fit indexes are within the acceptable level (RMSEA = 0.058, CFI = 0.94, and IFI = 0.94). The standardized coefficients of causal relationships are presented in Figure 1.

FIGURE : Standardized Regression Coefficient of Full TPB Model, t-Value in The Parentheses



Consistent with the theory, intention measured as motivation and perceived behaviour control is a significant indicator ($p < 0.001$) and explains 23% of the variance of seafood consumption frequency. The path coefficients of the behaviour with intention and with perceived behaviour control are 0.33 ($t = 4.74$) and 0.28 ($t = 3.77$), respectively. The result shows that only the attitude and subjective norm influences significantly ($p < 0.001$) the intention, and attitude is a more important predictor showing a standardized path coefficient of 0.43 ($t = 5.45$) with the intention, and norms have a coefficient path of 0.35 ($t = 4.91$). Perceived behaviour control was not a significant ($p > 0.1$) predictor of intention. The result is under our expectation.

At the specific-belief level, several fish attributes and cues contribute a significant amount to forming attitude toward (60%) and perceived behaviour control over (63%) fish consumption (see Fig. 2). In line with our assumption, fish bones and smell have a negative effect on attitude with a relatively low weight ($\beta = -0.10$; $p < 0.1$). Fish's taste, texture, and appearance as used to measure perceived quality have the highest impact on attitude. The perceived price has a significant effect on both attitude and perceived control with positively coefficient paths of 0.38 ($t = 4.17$) and 0.72 ($t = 5.12$), respectively. Perceived time (convenience) needed to cook and prepare fish as a meal and fish availability are also significant indicators of perceived control over fish consumption. The time effects on the control with a

coefficient path of 0.29 ($t = 3.7$) and the availability effect are at a relative amount of 0.18 ($t = 2.02$).

The intention to eat fish is determined by attitude and subjective norms but is not significantly impacted on by perceived control, which is a difference from previous studies (Olsen, 2001; Verbeke & Vackier, 2005). The result reveals two explanations. Firstly, the motivation to consume fish is under volitional control as TRA assumed (Fishbein & Ajzen 1975). This means that the consumers' intention to eat fish is driven significantly by their general evaluation of fish as a meal and social pressure such as family expectation and "other important" people over fish consumption. Secondly, the perceived control having a significant impact on behaviour but no effect on intention implies that eating fish is unlikely to be under completely volitional control and there is probably a difference between perceived control and actual control (Ajzen & Fishbein 2005).

The results confirmed that perceived quality keeps a significant role in determining the attitude toward the fish/seafood consumption (Olsen, 2002; Steptoe et al., 1995). Since the quality of seafood is determined as degree of freshness (Olsen, 2004), the product evaluated as high quality is clearly understandable in the case of Vietnam where the raw materials are fresh fish supplied directly from the local markets. It is observed that frozen seafood is not preferred and consumed broadly in the inland of the country. The preference for fresh fish is a challenge for the seafood industry in expanding the domestic market, especially for the marine fish products supplied from long distance.

Unpleasant smell and bones were proved to be significant reasons for less motivation or willingness to consume seafood across different countries (Bredahl & Grunner, 1997; Leek et al., 2000). However, our study results showed a relatively significant contribution ($p < 0.1$) of bones and smell in developing the global attitude. This is understandable in the case of Eastern cuisine, in which spices are usually used much in cooking so that the smell is not a problem. In the developed countries, fish products are often sold after preliminary processing so that the bones are removed. By contrast, in the case of Vietnam, consumers often buy whole fish and the bones are not removed in the preparation stage but at the eating table. The highly negative affect of unpleasant bones is a challenge for aquaculture and the processing sectors.

The consumers in our study rated fish as not expensive and relatively "suits my budgets". This judgment had a significantly positive effect on both attitude and personal control. It is possible to explain the result in the context of Vietnam, where fresh fish is mainly supplied directly from small-scale farms, and observed as being cheaper and easier to assess than other foods such as pork, chicken, or beef. The *availability* construct also has a significantly positive impact on perceived control. The availability of fresh fish at a low price in the local market is probably an advantage so that the product is chosen or substituted for other seasonal foods.

Fish is regarded as inconvenient because of the need to invest a large amount of time and effort in the stages of the process (Olsen et al., 2007). In our study, the time consumed for fish as a meal had a significantly positive influence on perceived control. The result is understandable as, in developing countries like Vietnam, when the time budget of individuals is available, the amount of time spent on a meal is not considered as a significant criterion/barrier. In addition, Eastern cuisine often has very complicated processes for preparing and cooking many types of meal with any materials. The comparative amount of time used for fish as a meal may be not longer than the time for other foods.

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